

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2004/001595

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC7 C07K 19/00, C07K 16/00, C07K 14/21**

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

C07K, C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and Applications for Inventions since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubMed, Delphion, CA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	Park, J.H., et al. "A divalent recombinant immunotoxin formed by a disulfide bond between the extension peptide chains" Mole. Cells, 2001, Vol. 12(3): pages 398-402, See entire document.	1-18, 20 19
X Y	US 4956453 (Cetus Corporation), Sep. 11, 1990, See entire document.	1-18, 20 19
A	Bera, T.K., et al. "Bivalent disulfide-stabilized fragment variable immunotoxin directed against mesotheliomas and ovarian cancer" Mole. Cancer Ther., 2001, Vol. 1: pages 79-84, See entire document.	1-20
A	Reiter, Y., et al. "Antitumor activity and pharmacokinetics in mice of a recombinant immunotoxin containing a disulfide-stabilized Fv fragment" Cancer Res., 1994, Vol. 54(10): 2714-2718, See entire document.	1-20
A	Zhu, Z., et al., "Remodeling domain interfaces to enhance heterodimer formation" Protein Sci., 1997, Vol. 6(4): 781-788, See entire document.	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

22 OCTOBER 2004 (22.10.2004)

Date of mailing of the international search report

**25 OCTOBER 2004 (25.10.2004)**

Name and mailing address of the ISA/KR



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**Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)**

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

a. type of material

a sequence listing  
 table(s) related to the sequence listing

b. format of material

in written format  
 in computer readable form

c. time of filing/furnishing

contained in the international application as filed  
 filed together with the international application in computer readable form  
 furnished subsequently to this Authority for the purposes of search

2.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/KR2004/001595

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4956453 (Cetus Corporation)	Sep. 11, 1990	EP 0226418B1 JP 62209098A2	May 27, 1992 Sep. 14, 1987